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ABSTRACT

In 1969, the Dial Access Retrieval System (DARS) was funded as a three year project for the Mitchell Public Schools, through ESEA Title III funds, to be a model demonstration library and resources center for other schools in similar rural situations. The main objective was the provision of audio tapes to meet the individualized needs of pupils, as well as to provide enrichment and remedial assistance. Nine hundred students and 44 teachers participated. Inservice training and workshops ensured at least a trial exposure to the system. Program counts indicated that DARS made an impact in each area of the curriculum, the greatest usage being in social studies, foreign language, and language arts. Evaluation activities were largely confined to attitude change regarding the acceptance of audio media. In all cases, significant change occurred in the viewing of audio learning as an essential ingredient in increased student learning. No measure of the impact upon the student's learning and teacher effectiveness was attempted. It was recommended that DARS be expanded by the addition of a video component and by its extension to other schools in the district. Appendixes present attitude questionnaires and statistical data. (Author/SL)

MITCHELL INDEPENDENT SCHOOL DISTRICT #45

MITCHELL, SOUTH DAKOTA 57301

LIBRARY DEMONSTRATION - DIAL ACCESS RETRIEVAL SYSTEM

END-OF-PROJECT
EVALUATION REPORT

ED 087465

LIBRARY DEMONSTRATION-DIAL ACCESS RETRIEVAL SYSTEM

Mitchell Independent School District #45

Mitchell, South Dakota 57301

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Superintendent of Schools

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Project Director

EVALUATION REPORT

for

LIBRARY DEMONSTRATION-DIAL ACCESS RETRIEVAL SYSTEM

Funded Through
The State of South Dakota
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SECTION 1 BACKGROUND INFORMATION

A. The Locale

The Dial Access Retrieval System was funded as a three year project for the Mitchell Public Schools in 1969 through ESEA Title III funds and was housed in the newly constructed Junior High School building.

Mitchell, South Dakota is a growing community of approximately 16,000 persons and represents the typical urban community in a rural setting. An additional 25,000 persons in the adjacent farmland and small communities consider Mitchell to be their major shopping center and the world famous "Corn Palace" attracts "hundreds of thousands" of tourists each year. Located in the more populated areas of the state on Interstate 90, Mitchell serves as the headquarters of several major industries and is one of the most frequently used convention sites in the state. Farming and agriculturally related business represents the major economic base with corn, cattle and hogs being the chief agricultural products.

Employment is relatively stable in the community and there are no extreme poverty or disproportionate number of families receiving welfare assistance. As in most agricultural areas, the rise and fall of market prices and bad or good growing seasons effect the local economy. The population is largely classified as middle to lower middle-income families.

B. The School System

In addition to approximately 900 students and 44 teachers in the Mitchell Junior High School where the Dial Access Retrieval System is housed, Mitchell Independent School District #45 has a high school with approximately 935 students (10-12) and 40 teachers and nine elementary schools with another 1540 students (K-6). Four rural elementary schools (K-8) are annexed to the district with a total enrollment of about 90 students. In all the district handles 3,470 students and 163 teachers (K-12).

The school system has maintained the highest level of State Department accreditation (Level 1 Exemplary) and the Junior High School holds the distinction of being the first and only Junior High School in the state to be an accredited member of the North Central Association. This would indicate that the teaching staff and facilities are more than adequate in comparison to other systems and it has been noted that they exceed all the minimum qualifications for North Central Association membership.

A brief summary of the school district budget indicates that there are $706 per pupil expenditures without federal support and that the district operating level is at $854 per pupil support which includes all federal monies.

Federal programs in the district other than the ESEA Title III include:

ESEA Title I and Title II
Title III NDEA
South Dakota Criminal Justice - Youth Education on Drugs
Emergency Employment Act

School district enrollment patterns have been relatively stable over the past three years and it has been projected that this will continue for several more years.

C. Needs Assessments

Prior to the construction of the new Junior High School in Mitchell, a survey of the school district needs indicated both a need for an expansion of the building facilities and also a strong interest in developing new opportunities for the youth. Such "opportunities" were investigated and a high priority was placed upon utilization of technology and equipment which would permit extensive and economical expansion of the planned facilities. The Dial Access Retrieval System arose out of the investigation for technological handling of instructional materials and was viewed as a desirable media to increase teacher/learner interaction.

Planned visitations were made to view other school systems and further exploration indicated that DARS would indeed be applicable to meeting the needs and interests of the new Junior High School. Title III ESEA funds were sought through the development of an innovative attempt to incorporate a working, model demonstration library and resource center in a more rural oriented setting. Further research and consultation supported the needs and potential for such an exemplary and demonstrative project in the State of South Dakota.

D. Historical Background

As partly explained in the needs surveys and resultant action, the approval of the ESEA Title III project for the DARS allowed the district to explore and develop the program in the new Junior High building. K/M Electronics was contacted and the building facilities were surveyed for installation of the electronic equipment. The basic equipment for the electronic communications included the following hardware and allied material:

(1) Twenty-four, four track, rack mounted program machines; (2) twenty student dial positions in the resource center; (3) Language Lab Master Console with thirty-two stations, eight stations have dial positions; (4) Two duplicating units which will dub any audio source to reel and reel to cassette; (5) eighty headsets; (6) three hundred fifty seven tapes; and (7) a capacity to expand the present system to 100 four track, rack mounted program machines.

The original deadline for installation was to have been October 1970, bus since the manufacturers could not make delivery of the hardware a final target date of January 25, 1971 was accepted and reached.

Although this delayed many opportunities for teacher inservice training and student involvement, the dilligence of the media specialist, the administration,

the staff and students did result in a meaningful program during the remaining part of the semester. The 1970-71 school year can be viewed as largely developmental with some actual and beneficial teaching/learning utilization. In 1971-72 the project truly blossomed into a full-fledged operating and demonstrative program. Student and teacher initial curiosities were turned into enthusiastic acceptance of the system. It is clear that the staff, administration, and even the students learned from their own short-comings and through trial and error and creative endeavors the DARS became more flexible. Total staff involvement was evident throughout the project funding periods and many teachers made a dedicated attempt to test the system to its fullest potential. It was not as easy for some staff members to become as involved as others beacuse of the very nature of their curricular area, space, and number of students. In review, however, every curricular area utilized the system to some extent as did all teachers.

During the 1972-73 school year the funding of the project by Title III ESEA was terminated and the district has continued full-scale operation on their own resources. Evaluation and assessment of the on-going program has been maintained in the hopes that further federal funding may be gained to add video and other components to the already installed and operating system.

Extensive use of the program has been considered which would extend the facility to include more vocational and technical materials which could be utilized by the area vocational technical program within the district. Summer school courses, adult basic education, and other programs have and will continue to use the Dial Access Retrieval System for many years in addition to the intended public school use.

SECTION II PROGRAM DESCRIPTION

A. Scope of the Program

The original intent of the Dial Access Retrieval project was to provide a model demonstration library and resource center for the schools of the state of South Dakota and other states and similar rural oriented situations. The obvious objectives of allowing the teacher to meet the individualized needs of the pupils were of course the prime considerations as were those of providing enrichment and remedial assistance.

Students in the newly constructed Mitchell Junior High School were considered to be the target population. There are approximately 900 students in the Junior High School which houses grades 7, 8, and 9. No effort was made to limit the scope of the program to any particular subject area or group of students. The Dial Access System was intended to be flexible enough to provide opportunities to meet the needs of all of the students attending the Junior High School regardless of rate, depth, and learning level of each student. Since the close of the funded project, however, the program has been extended to serve a group of special education students in the Junior High School.

As part of the individualization of instruction, one of the objectives of going to an audio retrieval type of approach was to provide students with opportunities for make-up and review work. Illness, hazards of rugged winter, environment, and the usual absence from class and school were viewed as areas of concern where audio tapes would assist in helping students. Teachers were encouraged to prepare make-up and review tapes for such concerns.

B. Personnel

Throughout the entire three years of funding the Dial Access Retrieval Program utilized only three specialized staff persons in addition to the regular teaching and administrative staff: one librarian, one media specialist, and one paraprofessional who worked a 6 hour day. Because of the nature of the project, all teachers, aides, and staff members were considered part of the necessary personnel.

The media specialist was the only person who was specifically employed as full-time personnel for the project. Her duties were primarily centered around the supervision and implementation of the Dial Access Retrieval System. She assisted in the preparation of tapes, locating of resource materials, maintained records of usage, maintained inventories of all equipment and materials and in general worked with the students and faculty in the on-going program. The media specialist hired for this project was considered the essential ingredient in the success of its operation. It was she who provided the inservice training, arranged for workshop training, gave the necessary demonstrations, and provided the data for accurare accounting and evaluation.

Since the Dial Access program was linked with the library, the use of the librarian and the library staff became essential in its operation. The DARS was viewed as enhancing the services of the library and therefore the librarian and the paraprofessional were also considered as vital personnel to the project.

In seeking personnel for the project, it became obvious that the most essential qualifications were those of having both a library and media background. The administrative and record keeping abilities of the media specialist proved to be important as did the ability to "trouble shoot" and diagnose the relatively complex mechanical systems. Fortunately only one (1) turnover in personnel was experienced, but the program continued to operate smoothly with the staff who emerged out of the library-media staff of the school system.

The administrative staff consisted of a project director and a secretary who were released from part of their duties in the school district's central administrative office for work on this project. The project director, a former school administrator, was placed on the staff to work with federal projects.

Evaluation of the project was maintained by an outside agency, the Educational Research and Service Center of the School of Education at the University of South Dakota; Dr. Bruce G. Milne, Director. This agency worked with the project throughout its funded period.

C. Procedures

1. Organizational Details: Mitchell's Dial Access Retrieval System was originally funded as a three year project in the 1969-70 school year and continued through until the final funded period ending in fall of 1972. Since all of the first year and part of the second were spent in planning, acquiring and installation of the hardware for the system the contents of this report and evaluation of its effectiveness are concerned with the latter part of the funding period. That is, that period following January 25, 1971 when the Dial Access Retrieval System was declared completely operational and all phases of the academic needs could be implemented. Some data in terms of needs assessments proceeds this date, however.

The equipment installation was delayed because of delivery and the project was in turn held in check for approximately three (3) months. This delay in installation limited the effectiveness of the project and its impact on the educational process during the second year of funding. In order to overcome the effects of the delay, special workshops were conducted to assist the staff in utilizing the system in their class activities. In the spring of 1971, throughout the summer, and during 1971-72 academic year a series of workshops were held which were designed to (1) assist the teachers in preparing tapes; (2) assisting in the developing and monitoring of tape presentations; (3) Utilizing resource materials; (4) adaptation of the DARS to individualization of instruction; and (5) creating a desire and interest in becoming actively involved in using the DAR system.

The physical arrangement of the Dial Access System can be best described as being in the Junior High School building. Although the main console which includes the power unit, electronic equipment, reproduction units and tape storage is housed in the library itself, there are "listening stations" throughout the entire building. There are 28 dial carrels in the library some of which are classified as "wet" because of their electric outlets for other equipment such as filmstrips, etc. An additional 32 units are available in the language lab, and every classroom in the building has access to the system through the intercom. The location of special classroom units are

according to various subject areas such as social studies, science, language arts, etc.

Throughout the funded period of three years the project has received periodic review. State officials from the ESEA Title III have made two or three visits annually, the Title III advisory committee has made an annual on-site visit, and the evaluation consultants have visited the project at least twice each year. The administration of the school district has maintained regular tours of the DARS system and through the public relations program the project has been highly publicized and visited.

An obvious need for inservice training in "how to use" the DARS program has been the major change in the original planning. It was assumed that the teachers would know how to and use the system, but through program development more needs evolved than the teachers could meet. A series of inservice training workshops opened up new horizons so that the project is currently "still growing" through teacher and student creative and innovative direction.

2. Activities: Following the installation of the equipment and assuming a full operational scale on January 25, 1971, the major activity of this project was and still is student usage. During the first period there was an initial curiosity and trying out of the system by both teachers and students, however, the measure of the project effectiveness was related to the primary objective of providing a vehicle which would allow the teacher to meet the needs of the students through individualized instruction. A second and very closely related objective was that of enrichment and remedial assistance through the use of good audio materials.

The students were very enthusiastic about being able to use a new educational tool. It is difficult to assess the effect of the audio tapes and use of the system on the actual learning process, however, the records of student use and the variety of uses were assumed to be indicators of impact on the teaching/learning condition. Some of the specific services made available for the students in general were:

a. Providing audio tapes in support of the general curriculum
b. providing specific tapes of class activities for home bound, hospitalized, and students on tour.
c. providing a wide offering of prepared (canned) enrichment tapes on a variety of curricular topics
d. Providing recordings of resource speakers
e. providing records of class discussion

In support of more individualized learning tapes were made available to specific students or groups of students which:

a. provided text reading for slow learners by adult volunteer workers
b. providing make-up work and drill activities
c. providing either accelerated or slower moving records of regular class instructional activities for meeting individual differences
d. providing audio tutorial packets prepared specifically for self use and self pacing.

Some tapes were prepared and used for general student and staff use such as "music listening tapes, tapes on family living, drug education, sex education, and environmental or ecological concerns. There was evidence that the tapes were having an impact on classroom instruction as the students listened to

presentations on various subjects. For example: nine sections of social studies participated in conservation activities specifically prepared for on tapes which led to greater appreciation, interest and concern for the topic of pollution. The measure was the carry-over from the tapes to class discussions. Similarly, listening to general music assignments such as learning the instrumental sounds and groups created greater interest in the curriculum of the vocal and instrumental program. Even the student council requested that a variety of music programs be played over the intercom throughout the day. Programs on jobs, mental health, and careers led to greater contact with the guidance counselors.

It is difficult to separate student usage from staff usage. Records kept of the checking out of head sets were maintained. The count was maintained from January 25, 1971 and is still being maintained. The average monthly lows indicated that there were 318 users and the monthly highs indicated 2,249 users. In the year and one-half that the program was operational under funding, there were 24,789 recorded student head set check outs. The highest recorded in any given period was 2,559 in Septmeber 1972.

Group study reports were made at the end of each month and recorded the number of times an instructor dialed in and requested a tape. During 1971-72 different instructional classes involving 8,000 students were recorded. The same tapes may have been used several times which would have made the figures larger. However, when one imagines the number of times the typical classes have to be "dialed in" to record 8,000 students, it speaks to the load on the system.

Program counts were made on specially prepared tapes and the number of times that tape was "dialed in" was reported. The average low program count was 2,000 and the average high 5,000. A maximum of over 7,000 was recorded in one week and on occasions the count dropped to under 1,000. This count was highly dependent upon the number of absences, prepared reading assignments and teacher preparation activities. The most significant growth which was noted was not in the increase in program count but rather that late in 1971-72 and into 1972-73 there has been an expansion into different areas of instruction. Also significant in the data was the recording of use of more teacher prepared tapes and less use of "canned" tapes. For example, early program counts indicated use by the language lab, English and math classes as being the top users. Final data indicated that social studies and math were heavy users and tapes were appearing in vocational and physical education classes. Apparently the effects of inservice training, the use of facilitators and other staff usage has made an impact.

At the outset, not all staff members were enthusiastic as is the case of most new and innovative practices. Through encouragement, inservice training, and "forced practice" under workshop facilitators every staff member was actively involved in the program. This evidence plus the increased use data shows that the staff has made a positive response to the program. Large group, small group, and individualized instruction has utilized the DARS program in nearly every curricular area. Naturally, some areas are more readily adaptable to audio tapes than others.

3. Instructional Use: The use of the DARS program required changes in instructional techniques. The staff was reluctant to give up their own traditionally developed techniques of teaching, but soon realized the potential

of the tapes in developing new instructional techniques. They developed new presentations and recorded them on tapes which could be used in both the classroom and individual student study stations.

A breakdown of curriculum areas and the area of subject matter that was presented through the Dial Access Retrieval System indicated its use.

a. social studies department used it for large group presentation involving drug programs, conservation, and background on various countries. These were teacher prepared tapes or taped recordings by community resource personnel.
b. science department prepared tapes for preview and review for small group or individual study stations to accompany their individualized science program in the form of audio-tutorial tapes.
c. math tapes were made to complement their daily assignments on individualized programs. Enrichment tapes also were used for the math students.
d. Music tapes were presented for large group presentations and for individual listening for appreciation or to learn new songs or techniques.
e. Industrial arts used the DARS to teach the nomenclature of basic tools in woodworking and identifying parts of machines.
f. Physical education instructors used the tapes to explain rules and procedures in athletic, physical education activities, and health programs. Use of study guides and filmstrips accompanied the taped presentations.
g. Foreign languages used dialogues, pattern practices and cultural tapes on an individual basis and in group study through the language lab. Some tapes were commercially prepared, however most were either student or teacher made tapes.
h. Language arts used tapes for grammar review and literary appreciation. These were used in large group situations and on an individual basis.
i. Home economics classes used the tapes for family living units, sex education, career orientation and homemaking audio-tutorial units.
j. Fine arts used tapes for developing appreciation units and audio-tutorial learning.
k. Guidance personnel used the tapes for general counseling and career awareness.
l. Commercial subjects developed tapes which emphasized consumer education.

In review the greatest use was recorded in the area of social studies, foreign languages and language arts. There appears to have been a general impact on each area of the curriculum and a positive, favorable and increasing effect on student and staff teaching/learning behavior. The general hardware equipment and the software have been implemented effectively into the educational program and student, faculty and parental reaction has been viewed as enthusiastic.

4. Parent-Community Involvement: The Dial Access Retrieval System involved public and parent involvement from the outset. An ideal opportunity to "show off" the hardware and use of the system because of the open house tours of the new Junior High building in which the project is housed. Parents were involved in pre-test attitude surveys and parents and other adults were called upon to make tapes for specific programs.

A woman's honorary Beta Sigma Phi has taken as one of its projects the recording of textbook materials for literature and social studies reading assignments for slow readers. Such recordings have been found to be useful as pacing tools and has indicated increased comprehension. Several parents have been called upon to prepare special interest or resource tapes for classes in social studies and science classes.

In both operational years of the funding period, community members have been invited to an open-house at which time the DARS has been explained and demonstrated. Similarly, groups of parents have been invited to watch the program in operation and many parents have been given an opportunity to view the system on parent-teacher conference days. The project has been viewed as both an exciting and desirable addition to the learning facilities. There appears to be a certain "magic" or "electronic age" appeal which intrigues most adults and has been beneficial to the acceptance of the DARS project. Apparently the system has carried an air of future projection which has enhanced the public relations program of the entire junior high.

News releases in the local paper and school programs on television have featured the Dial Access program. An additional dissemination outlet has given the project statewide publicity. The SDEA has held its annual convention in Mitchell in 1971 and have selected Mitchell as the site for their annual convention in 1973. Approximately 7,000 teachers from throughout the state have participated in tours through the new Junior High School each year. One of the points of emphasis on those tours has been the library where the DARS program is demonstrated.

Visits from interested parties from states other than South Dakota have been recorded. School systems contemplating introducing DARS programs in their schools have utilized this project for demonstrative and exemplary purposes. One group from Mexico was so involved. A manpower survey team from Denver, Colorado spent considerable time viewing the workings of the project as a way of projecting librarianship needs, storage and retrieval. As with the local parents and adults, acceptance has been enthusiastic and positive. No problems in public relations or acceptance have been recorded.

D. Budget

Since its approval in 1969, the Dial Access Retrieval System received $72,329 in ESEA Title III funds. The local district provided approximately $34,000 additional funding which gave the total project a development and operational backing of $106,000 for the three year period. The initial hardware and installation cost approximately $60,000. Estimated additional software costs were $7,300.

The entire project was funded from 1969 through the fall of 1972 and was primarily classified as an ESEA Title III project however, local and other federal and state monies had ancillary or side effects on the project and its success.

It should be noted that the first stated objective was to provide a model demonstration library and resource center for the schools of the state of South Dakota and other states with similar rural oriented situations. Funding for this project was justified on the basis of the application of the DARS as an innovative move in a rural setting. The construction of a new Junior

High School building enhanced the installation of the system because the building was equipped with up-to-date and ideal sound systems, power facilities and space allocations. Although these consideration do not appear as budget items, there was a positive financial advantage provided by the local district which enhanced the success of the project because of the new construction.

Per pupil costs are virtually impossible to estimate because of the nature of the project and the heavy dependency upon the hardware which is basic to the system. Similarly, the projected dollar estimate for continuation costs are difficult since the system has become an integral part of the library-media center in the Junior High School. As the system is expanded to handle other buildings within the school district and surrounding schools, per pupil cost accounting becomes a more meaningless point of comparison. It has been estimated that the system has only reached a fourth of its potential. Closed circuit or micro wave linkage to other buildings including the vocational-technical center would service many more students and curricular areas without additions to the basic operating system.

Detailed budget items, including the equipment costs (based on 1969 listings), are available at the Project Director's Office in the Central Administration Building.

SECTION III EVALUATION

The program objectives as previously stated spoke to three major concerns: (1) providing an exemplary and demonstrative model (2) providing for individualization of instruction, and (3) providing for enrichment and remedial materials. From these program objectives specific performance objectives were established by the evaluation agent from the University of South Dakota. Those objectives were categorized as affective: which sought attitudes and opinions regarding the need for individualization, alternatives to instruction, broadening scope of use, acceptance of change and potentials of the system.

what were the measures

Teachers, students, student-teachers, parents, and administrators participated in a variety of program measures. There was a programmed on-going evaluation which called for periodic accounting of student and teacher use of the system. In addition to statistical data, an annotated log was maintained by the media-specialist which recorded all day-by-day transactions, equipment adjustments and program happenings. Accurate inventories were maintained and visitor counts were kept. Publicity records, announcements and unique entries were kept on file and are available at the library.

No attempt was made to include or exclude any student or groups of students other than the entire Junior High School population, its teachers and staff. Beginning with the fall term in 1972-1973 a group of special education students from the Junior High School were included in the program use. Participation in the project was generally left as voluntary in nature for

both students and teachers, however, inservice training and workshops somewhat forced trial exposure to the system.

Because of the involvement of the total student and teacher populations, the evaluators used a variety of sampling techniques in the evaluation.

The project was viewed as an evolving program and the typical pre and post-testing activities were largely confined to attitude change regarding the needs for acceptance of audio media as an alternative to instruction. This involved testing of student, teacher and parent attitudes. In an attempt to gain an observational check on the project, student-teachers were added as an attitude measure.

The summary of findings on attitude change revealed that the most significant changes occurred in the viewing of audio learning. In all cases (students, teachers, parents, and student-teachers), audio learning was deemed as an essential ingredient in increasing student learning. Further findings indicated a change in the attitude toward where audio learning would be most applicable. In the pre-testing, the samples of students indicated social studies as the area which audio learning was most likely to apply. The post-testing revealed that social studies, math, language arts and science were the most applicable which indicated the broadening of the scope of use.

The most significant changes in parent attitudes were noted in the acceptance of the individualization program of the Junior High School. Parents tended to view the program in more global terms. They did not isolate the DARS project as such, but viewed the entire move toward individualization as favorable.

Teacher attitude changes were significant in the acceptance of the DARS project. In the initial survey in 1969 83% of the teachers reported that they did not utilize tapes and taping as a method of instructing students. In the post-testing only 12% made such a claim. All teachers surveyed indicated that they had attempted to utilize audio components in their instruction sometime during the project period. Teachers apparently tried the system. Some found it more applicable because of their subject or curricular offerings than others.

Student-teachers surveys indicated a "conversion" to audio teaching/learning and that most considered the preparation as teachers for audio instruction as being "inadequate". The student-teachers saw the DARS as being "effective" but not used to its potentials in the Junior High School.

The overall evaluation of the project included interviews with students and teachers regarding the utilization of the project. A team of interviewers from the University of South Dakota visited with a stratified sample of students and teachers and asked them to demonstrate their competencies in using the equipment and explaining its use. With the exception of a few isolated instances, all those interviewed in the Spring of 1972 demonstrated an acceptable understanding and ability to use the system.

The ultimate measure of the effectiveness of the DARS project rested on the immediate impact upon the Junior High School in terms of understandings and the ability to use the equipment. No measure of the impact upon the student's learning and teacher effectiveness was attempted. It can only be generalized

that from the wide spread use and exposure to audio learning, there has been a significant gain in student learning. Remedial work, make-up lessons, review, and enrichment exercises were viewed as means of reaching individual students. In the opinion of those who observed the project, this wide spread use made an impact on teacher/student interaction and thus has made an impact on student learning. For those students who utilized the system as an enrichment tool, only time will tell the impact on their learning, but, for the present, it is suffice to conclude that it opened doorways heretofore closed to them.

SECTION IV RECOMMENDATIONS

From the experience of working with the Dial Access Retrieval System for three years, the project director, media specialist, and principal evaluator make the following recommendations:

1. That in order to achieve the fullest potential of the Dial Access Retrieval System, it is essential that video components be added to the installed and operative audio hardware and software.

2. That, since the hardware is only operating to one-fourth of its potential, closed circuit, micro-wave linkage with other buildings within the Mitchell School System be made. The potential of the system should be expanded to include the vocational-technical program and rural or outlying schools within a 25 to 50 mile radius.

3. That a continued effort be made to present inservice training and workshop programs for the teachers in the Mitchell Public Schools so as to expand the individualization of instruction potential and develop audio-tutorial units of instruction in a variety of curricular areas.

4. That the School district and the State ESEA Title III officials prepare and disseminate graphic, pictorial, and statistical information on the details and workings of the Dial Access Retrieval System in the Mitchell Public Schools.

5. That the State ESEA Title III consider the Dial Access Retrieval System as a successful innovative, exemplary and demonstrative project and seek federal validation to support the same.

Consultant Activities and Workshops

Nov. 12, 1970 - Evaluation Inservice Training Session - held at the Administration Building in Mitchell to discuss the necessary steps that should be taken in order to develop a sound evaluation of the Dial Access Retrieval System. Consultant - Dr. Bruce Milne, School of Education, University of South Dakota representing the Educational Research & Service Center, Vermillion

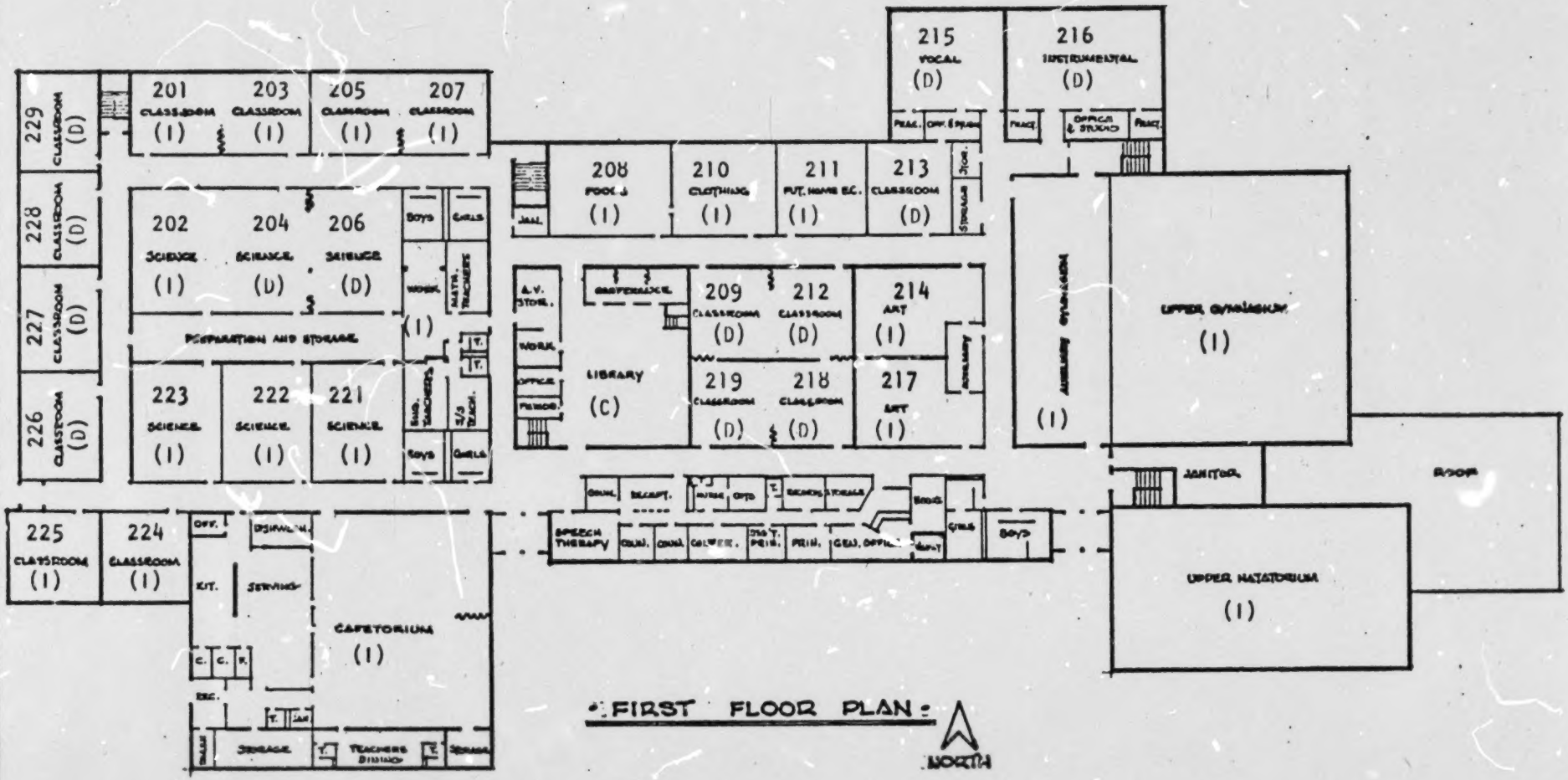
Mar. 27, 1971 - Instructional Inservice Training Session - to provide in-service training to all instructors so that they became aware of the potential of the DARS and gain specific ideas of how to use it in their classrooms. Consultant - Mr. Roger Hohn, Oak Grove Junior High, Bloomington, Minnesota.

Oct. 14-15, 1971- Instructional Inservice Training Workshop - to promote setting goals and objectives in subject areas to improve the instructional activity. Facilitator - Dr. Lowell Schoer, University of Iowa, Iowa City, Iowa.

Nov. 11, 1971 - Instructional Inservice Training - to provide teachers with necessary educational and technological skills involved in the preparing of tapes designed to fit the curriculum in different subject areas. Consultant - Dr. Markland, Director of Educational Media Services, South Dakota State University, Brookings, South Dakota.

Jan. 26-27, 1972- Inservice Training Workshop - to provide instruction on enrichment of instruction by preparing audio-tutorial units in cognitive, affective, and psychomotor areas. Facilitator- Dr. James Mitchell, Educational Research and Service Center, School of Education, University of South Dakota, Vermillion.

Oct. 26-27, 1972- Inservice Training Workshop - to design audio tapes for terminal objectives and utilize other media to promote variety in teaching. Facilitator - Miss Van Ftergiotis, 80 Kane Street, West Hartford, Connecticut.

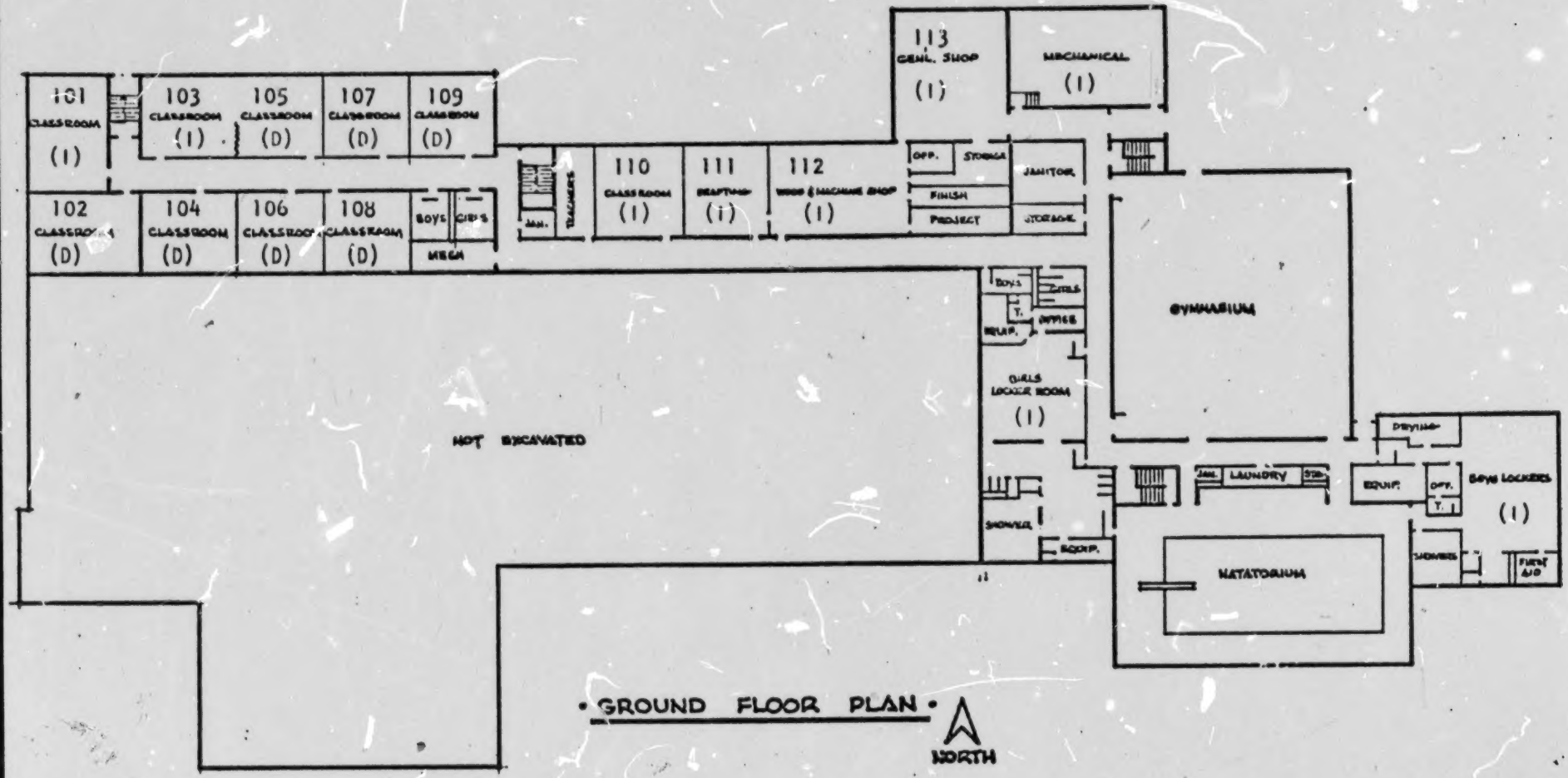


(C) Indicates listening stations - carrels
(D) indicates dialing stations
(I) indicates intercom stations

• MITCHELL JUNIOR HIGH SCHOOL •
MITCHELL, SOUTH DAKOTA

• SCALE: 0 10' 30' 50' / 5' 20' 40'

WALTER J. DIXON, A.I.A., ARCHITECTS
MITCHELL, SOUTH DAKOTA



(C) indicates listening stations - carrels
(D) indicates dialing stations
(I) indicates intercom stations

• MITCHELL JUNIOR HIGH SCHOOL •
MITCHELL, SOUTH DAKOTA

SCALE: 0 10' 20' 50'
0 20' 40'

WALTER J. DIXON, A.I.A., ARCHITECTS
MITCHELL, SOUTH DAKOTA

Final Report #1

STUDENT ATTITUDE SURVEY POST TEST AND SUMMARY
Mitchell Junior High School
ESEA Title III Project

Center Report Series 70-101

Bruce G. Milne, Evaluator
Charles K. Draheim, Research Asst.

October 10, 1972

Educational Research and Service Center
School of Education
University of South Dakota
Vermillion, South Dakota

October 10, 1972

Mr. Wilfred W. Richter
Director of Planning
Mitchell Independent School Dist. #45
Mitchell, South Dakota 57301

Dear Mr. Richter:

The Final Report of the Student Attitude Survey is presented on the following pages. The brief summary that is included with the report covers only the most drastic changes from pre to post test.

The complete attitude survey is presented with the percentages of the responses given for the pre test and the post test. This method of presentation was chosen as it gives the reader a clear and concise picture of the survey findings.

Respectfully submitted,

Bruce G. Milne

Bruce G. Milne, Director
Ed. Research & Serv. Center

BGM:akj
Enclosure

MITCHELL REPORT (POST)
Student

The results of Data Gathering Instrument #2 - Student Attitude Survey - post test (spring, 1972) are compared with its pre test results (spring, 1971) in this report. The small sample used in this study (1971 = 61 1972 = 100) was taken from 7th (1971) and 8th (1972) grade students. The purpose of the student attitude survey was to determine to what extent the Dial Access Information Retrieval system would develop positive attitudes which would modify the individual's behavior in regard to the DAIRS and other multi-media systems. From the comparison of the results of this instrument it is intended to show the movement in direction (if any) of the attitudes of the students.

Table I (on the following page) reports the pre and post test percentages for the first group of questions (#'s 1-6). In Question #1 approximately 20% more of the students in the post sample considered themselves to be only fair readers. In the pre-sample this shifting, 20%, classified themselves as good readers. Question #5 reflects a slight increase in percentage for individuals who wish to learn by reading themselves. These shifts may indicate that the more average reader wishes to study by himself, whereas the more gifted reader may not.

Question #6 reveals the most dramatic change of any of the questions in Table I. In the pre-sample 44% reported that their favorite school subject was social studies, whereas in the post study only 18% indicated social studies. The post study reveals a much wider and more evenly distributed selection of favorite subjects seven groups ranging from 18% to 8%. The pre-sample was grouped into three main areas: social studies, language, and math with 78% of the total. The percentages ranged from 44% to 2% for the seven categories. The difference in these samples may be attributed to a more representative sample in the post test or to a broadening of efforts by individuals, in other subject fields, to present their area in a more positive light.

TABLE I

	Pre Percent	Post Percent
1. I consider myself to be a		
very good reader	10%	11%
good reader	62	43
fair reader	25	45
poor reader	3	1
2. Compared to the rest of the students in my class		
I read about the same number of books each year	48	63
I read a lot more than most	11	21
I don't think I read as much as most of them	18	16
No Response	23	0
3. If I had a choice, I'd rather		
have a chance to read a story to myself	82	88
have someone read the story to me	3	3
have someone read the story while I follow in my book	12	7
have the teacher read the story to me	3	2
4. When a teacher reads the lesson material in class		
I think I get more out of it than if I read it myself	48	54
I think it is unnecessary at our grade level in school	16	19
I would like to try to read it myself	20	27
No Response	16	0
5. When there is something new to learn in school, I think that I		
learn it best by hearing it read.	28	25
learn it best by reading it myself	36	45
learn it best by reading in my book while someone reads it aloud	36	30
6. My favorite subject in school is		
language	18	14
Science	5	8
Math	16	18
Social Studies	44	18
Fine Arts	3	15
Physical Education	2	8
Vocational	3	12
No Response	8	3

Table 2 (on the following page) reports pre and post test percentages of students opinions. In Question #4 concerning teachers doing a good job of teaching, there has been a shift away from the extreme positive. In the pre test 82% either strongly agreed or agreed. In the post test this percentage drops to 54%. Generally the percent of positive responses (strongly agree, agree, and tend to agree) has remained close (pre - 90% post - 78%).

Question #6 dealt with the amount of talking the teachers do. Twenty-four percent of the pre test students thought that teachers talk too much compared with sixty-one percent of the post test students.

In Question #7, 63% of the pre test students and 34% of the post test students thought that their teachers let them decide on a lot of things they study.

Question #8 dealt with the teachers knowing the students as a person. Thirty-nine percent of the pre test students agreed with the statement that teachers don't really know me, compared with 63% of the post sample.

In Question #9, 93% of the pre test students thought that teachers use a lot of different things to make classes interesting. Seventy percent of the post test students responded in the same positive manner.

Question #15 shows that 54% of the pre sample and 80% of the post sample students thought that they should be able to go to the library when the teacher is through with her part of the lesson.

In Question #18 concerning students getting plenty of chances to work by themselves on the things they like to learn about, 67% of the pre test group and 40% of the post sample felt that they did.

Question #21 deals with the need for more practice taking notes. In the pre sample 72% felt they needed more practice. In the post sample only 49% felt they needed the practice.

In Question #24, the students thought that the language laboratory could only be used by language students 26% of the time in the pre test and 67% of the time in the post test.

In summary of the Student Attitude Survey, it is fairly safe to say that these shifts are only tendencies and not absolutes. Any conclusions drawn would have to mention the apparent shift in a negative direction on Questions #4 and #8. (#4 Our teachers do a good job of teaching; and #8 The teachers don't really know me as a person, I'm just another pupil.) These questions are the real core of the findings of the survey. The results of these questions may even be related, but in any case they certainly deserve careful thought and consideration.

Conclusions on the other questions that showed a shift in direction (#6, #7, #9, #15, #18, #21, and #24), could possibly be classified as information giving. This information can be useful in keeping touch with the ever changing feelings and attitudes of the students.

TABLE II

Check the column which best describes your opinion

	%	SA	AG	TA	TD	DG	SD	NR
1. Most people like to read.	Pre	5	46	38	10	2		
	Post	1	41	42	11	3	2	
2. It is not as important to read nowadays as it used to be.	Pre	3	2	8	8	30	48	2
	Post	3	5	12	13	31	36	
3. Most people listen to the news rather than read it.	Pre	7	34	28	25	7		
	Post	10	38	34	12	6		
4. Our teachers do a good job of teaching.	Pre	52	30	8	2			
	Post	14	40	24	12	8	2	
5. Our class does not get enough time in the library.	Pre	13	23	34	13	13	3	
	Post	15	17	23	27	11	7	
6. Most teachers talk too much.	Pre	8		16	33	30	8	5
	Post	21	15	25	17	15	5	
7. Our teachers let us decide on a lot of things we study.	Pre	8	25	30	16	13	8	
	Post	3	23	29	22	15		
8. The teachers don't really know me as a person; I'm just another pupil.	Pre	8	20	11	28	16	13	3
	Post	20	14	29	18	10	9	
9. Our teachers use lots of different things to make our class interesting.	Pre	26	51	16	5	2		
	Post	8	22	40	17	9	4	
10. Studying by yourself is a good way to learn.	Pre	16	20	20	21	13	5	5
	Post	10	16	23	23	18	9	
11. We never get a chance to work in small groups; it always has to be the whole class.	Pre	7	7	16	28	36	7	
	Post	12	11	22	18	23	14	
12. Our teachers really aren't too interested in what the kids want to learn; they have it all figured out what we should study.	Pre	2	18	25	15	23	15	3
	Post	21	24	21	12	10	11	
13. When they get the new equipment in the library, we are going to get to learn stuff on our own.	Pre	7	43	33	15	3		
	Post	4	20	46	6	5		
14. Most of the kids in our class study pretty hard in school.	Pre	2	31	41	13	7		7
	Post	4	20	35	22	8	10	
15. A student should be able to go to the library when the teacher is through with her part of the lesson.	Pre	7	31	16	28	13	5	
	Post	26	26	28	14	5	1	
16. Most students need to have somebody watching them in the library or else they will get into mischief.	Pre	16	21	28	13	7	7	8
	Post	8	16	27	16	16	16	

17. There isn't much you can learn just by listening.

18. The students in our class get plenty of chances to work by themselves on the things they like to learn about.

19. We never get a chance to listen to things like music, or stories or things like that on our own. It always has to be the whole class or not at all.

20. If you miss school, you really don't have any chance to find out what went on in class except by what your friends tell you.

21. We need more practice in taking notes when somebody is giving a talk or a lesson

22. There should be some way a student can listen to a lesson over again in case he wants to check his work or assignment.

23. If we wanted to, there isn't any way that we can hear great music like an opera or a famous concert in our school.

24. Only the students in a foreign language class can use the language lab.

25. Most of the kids are really excited about the new equipment being installed in the library.

%	SA	AG	TA	TD	DG	SD	NR
Pre		7	13	21	28	31	
Post	6	5	20	23	28	18	
Pre	5	28	34	11	16	3	2
Post	6	16	18	26	18	16	
Pre	11	36	23	16	2	8	3
Post	29	20	21	22	3	5	
Pre	18	25	7	16	23	7	5
Post	20	20	26	15	12	7	
Pre	10	36	26	11	7	7	3
Post	9	18	22	23	14	14	
Pre	25	54	13	2			7
Post	23	34	35	3	2		
Pre	5	30	20	20	11	11	3
Post	9	16	24	22	13	16	
Pre	3	13	10	28	20	23	3
Post	21	21	25	17	10	15	
Pre	30	38	18	8	3		3
Post	9	22	45	10	7	7	

Final Report #2

PARENT ATTITUDE SURVEY POST TEST AND SUMMARY
Mitchell Junior High School
ESEA Title III Project

Center Report Series 70-101

Bruce G. Milne, Evaluator
Charles Draheim, Research Asst.

October 10, 1972

Educational Research and Service Center
School of Education
University of South Dakota
Vermillion, South Dakota

October 10, 1972

Mr. Wilfred W. Richter
Director of Planning
Mitchell Independent School Dist. #45
Mitchell, South Dakota 57301

Dear Mr. Richter:

The Final Report of the Parent Attitude Survey is presented on the following pages. The brief summary that is included with the report covers only the most drastic changes from pre to post test.

The complete attitude survey is presented with the percentages of the responses given for the pre test and the post test. This method of presentation was chosen as it gives the reader a clear and concise picture of the survey findings.

Respectfully submitted,

Bruce G. Milne

Bruce G. Milne, Director
Ed. Research & Serv. Center

BGM:akj
Enclosure

MITCHELL REPORT (POST)
Parents

The results of the post test of Data Gathering Instrument #5 - Parent Self-Evaluation are compared in this report to the pre test of the same instrument given in the spring of 1971. The small sample used in this study (1971 = 59 1972 = 38) was taken from the parents of eighth grade students. From the comparison of the results of this instrument it is intended to show the movement in direction (if any) of the attitudes and knowledges of the parents regarding the DAIRS, its application in the teaching-learning situation, and its use in the educative process. In addition to information related to the DAIRS, a few general questions about school public relations are also compared in the pre and post testing.

In the first eleven questions in Table I (on the following page) there appears to be a positive movement (post test compared to pre test) regarding informing the parents about the DAIRS (Questions #2, #3, #4, #5). Question #2 shows a very positive movement of 26% more correct answers (68% as compared to 42%).

In the questions concerning public relations #1, #6, #7, #9, #10, there also appears to be a positive movement. In questions #6, #7, and #9 this movement is not real strong but more important all three questions are moving in the positive direction. Questions #1 and #10 both show very positive movement. Question #1 deals with feelings on being informed about DAIRS. In the pre test 47% felt that they know about, or are fairly well informed about the system being installed, this is compared to 76% on the post test, a 29% increase. Question #10 deals with the number of visits to the school. In the pre test 45% had visited the school 5+ times and one individual had not visited at all. In the post test 77% had visited the school 5+ times and no one had not visited at all.

The real significance of this data cannot really be determined because of the extra length of time the students have been associated with the system (7th graders compared to 8th graders).

TABLE I

	Pre Percent	Post Percent
1. In regard to the Dial Access Information Retrieval System being installed in the Mitchell Junior High School, I feel that		
A. I am fairly well informed as to what is being installed	12%	34%
B. I know about the system being installed	35	42
C. I know very little, if anything, about the system being installed	28	16
D. I am completely unaware of the system or its installation	13	5
No Response	12	3
2. The Dial Access Information Retrieval System is being installed in our school with funds made available mostly through:		
A. Local tax funds	8	3
B. State funds	8	8
C. Federal funds	42	68
D. Local and State tax money	22	8
E. Donations	2	0
No Response	18	13
3. The Dial Access System will		
A. Replace the present library	0	0
B. Add to the facilities of the present library	77	81
C. Have nothing to do with the present library	5	0
D. Make the present library more attractive	3	10
No Response	15	8
4. The Dial Access System is used somewhat like a		
A. Telephone	67	74
B. Television set	3	3
C. Phonograph	7	10
D. Movie projector	0	0
E. Filmstrip projector	10	0
No Response	13	13
5. The Mitchell Junior High School is		
A. The first school system in the state to use a Dial Access Information Retrieval System	18	26
B. The only school in the state to have a Dial Access System	2	10
C. The first Junior High in the state to have a Dial Access System	40	37
D. None of the above	12	5
E. All of the above	15	10
No Response	18	10

	Pre Percent	Post Percent
6. Which statement best describes your contact with the Mitchell Junior High School?		
A. I am generally pretty well informed about what the school is doing in its instructional program	20	21
B. I have a general idea what the school is doing in its instructional program	38	45
C. I have only limited information on what the instructional program involves	25	26
D. I really don't know much about the instructional programs at all	13	8
No Response	4	0
7. In terms of keeping the parents informed about the school's instructional program, I feel the Mitchell Junior High School		
A. Does a very fine job of informing	12	3
B. Does a fairly good job of informing us	37	53
C. Could do a much better job of keeping the parents informed	34	34
D. Does not do a very good job of keeping us informed	8	8
No Response	8	3
8. In general, I think the Mitchell Junior High School		
A. Teachers are doing an outstanding job of teaching our children	10	8
B. Teachers are doing a better than average job of teaching our children	65	66
C. Teachers are doing a fair job of teaching our children	22	21
D. Teachers are doing a poor job of teaching our children	0	5
No Response	3	0
9. How would you consider yourself in regard to school activities?		
A. Very active in school activities	5	8
B. Moderately active in school activities	24	21
C. Limited activity in school affairs	56	66
D. Never active in school affairs	8	3
No Response	7	3
10. Since the new school has been opened, how many times have you been in the building or visited school?		
A. Never	2	0
B. One or two times	24	8
C. Less than five times	27	16
D. Between five and ten times	33	31
E. More than ten times	12	45
No Response	2	0
11. Did you have any children in your family who attended the Junior High School before they moved into the new building?		
Yes	45	45
No	48	53
No Response	7	3

The brief attitude survey reveals little additional data.

The less extreme positive responses on questions #1 and #2 (Table 2) may be connected with the wearing off of the novelty generated by a new building and a new program.

Question #9 shows an increase in the positive direction (90% to 79%) indicating that the new innovations in your school are not only viewed as a positive move but are increasing in respect among parents. Question #10 increased 11% points in the positive direction indicating that perhaps the parents, after a couple of years of your new programs, may not be as comfortable with all the free time their children have as they once were.

In question #14 there is a move to a more extreme positive response concerning parents wanting to be consulted about the program their children are involved in. If any question would show a "red flag" perhaps this question would be it, 79% of the parents want input into the school's programs and 13% felt more strongly about this than previously.

TABLE II

Please indicate your attitude about each of the following statements by checking the column at the right which most represents your feeling

	%	SA	AG	TA	TD	DG	SD	NR
1. Most of the children seem to enjoy school.	Pre	15	71	14				
	Post	13	58	26	3			
2. The new building has made an improvement in general school attitudes.	Pre	41	52	7				
	Post	24	47	21	3			
3. There are greater opportunities to learn in the new school than in the old building.	Pre	47	35	12	2	2		2
	Post	37	42	18				
4. Actually there are more "frills" but the basic instruction program hasn't changed much.	Pre	3	20	17	31	20	7	2
	Post	5	29	8	34	16	5	
5. The teachers demand more of the student than they should	Pre	2	7	12	34	35	10	
	Post	5	8	10	37	32	8	
6. The teachers are doing a better job of teaching than they did before the new building.	Pre	2	25	42	19	7		5
	Post	0	29	29	13	13	8	
7. There seems to be more opportunities for the children to use the library.	Pre	14	52	23	2	2	2	5
	Post	18	42	26	8			
8. My child gets enough individual attention by the teachers.	Pre	5	35	35	14	8	2	
	Post	5	32	21	24	5	10	
9. The students from our school will be better able to do high school work than did former students because of the newer teaching techniques.	Pre	14	44	32	8	2		
	Post	16	29	34	5	5	5	
10. Students are given too much freedom in our school.	Pre	5	7	14	34	30	8	2
	Post	3	10	24	39	16	3	
11. Most of the teachers my child has in school really never get to know him (her) as an individual.	Pre		14	23	35	20	7	
	Post	5	10	18	34	24	8	
12. Most of the parents are fairly satisfied with the Junior High School program.	Pre	3	58	30	2	2		5
	Post	5	50	34	3	3	5	
13. The teachers should spend more time with the individual students than they do.	Pre	3	20	48	25		2	2
	Post	10	18	42	13	13		
14. Parents should be consulted about the program of study their children are assigned.	Pre	12	30	29	17	10		2
	Post	21	34	24	8	10		
15. The school should give the parents more of an opportunity to get acquainted with the school's program.	Pre	22	35	30	8	2		2
	Post	21	29	42	3	5		

Final Report #3

TEACHER ATTITUDE SURVEY POST TEST AND SUMMARY
Mitchell Junior High School
ESEA Title III Project

Center Report Series 70-101

Bruce G. Milne, Evaluator
Charles Draheim, Research Asst.

October 10, 1972

Educational Research and Service Center
School of Education
University of South Dakota
Vermillion, South Dakota

October 10, 1972

Mr. Wilfred W. Richter
Director of Planning
Mitchell Independent School Dist. #45
Mitchell, South Dakota 57301

Dear Mr. Richter:

The Final Report of the Teacher Attitude Survey is presented on the following pages. The brief summary that is included with the report covers only the most drastic changes from pre to post test.

The complete attitude survey is presented with the percentages of the responses given for the pre test and the post test. This method of presentation was chosen as it gives the reader a clear and concise picture of the survey findings.

Respectfully submitted,

Bruce G. Milne

Bruce G. Milne, Director
Ed. Research & Serv. Center

BGM:akj
Enclosure

MITCHELL REPORT (POST)
Teachers

The results of the post test of Data Gathering Instrument #4 - Teacher Self-Evaluation are compared in this report to the pre test of the same instrument given in the spring of 1971. The small sample used in this study (1971- 42, 1972 - 43) was taken from the Mitchell Junior High School Teaching staff. From the comparison of the results of this instrument it is intended to show the movement in direction (if any) of the attitudes and knowledge of the teachers in regard to the DAIRS, its application to their subject area, and its aid to the educatime process along with the extent to which they expect to use the system.

Table I (on the following pages) deals with teacher class presentations and activities. In explanation of the various numbers, the top row of numbers in each group of squares is the percentages of responses of the pre test sample. The bottom row of numbers are the post test sample percentage.

In question #1 dealing with the extent teachers use reference materials, there was a shift in a positive direction. The pre test sample found 65% of the teachers either often or occasionally using reference materials while the post test sample percentage was 88.

Question #4 concerning spending time with individual students on single learning concepts found a slight shift to the extreme positive. 70% of the post test group and 60% of the pre test group reported that they often spent time in this manner. 12% of the post test sample reported seldom or never on this question while zero did on the pre test.

In question #11 there was a shift from often to occasionally regarding the use of non-print materials in teaching. The pre test showed 52% often and 36% occasionally. The post test reported 28% often and 63% occasionally.

Question #14 dealing with students being permitted to work toegether in small groups showed a slight shift to often. 57% of the pre test group reported often as compared to 72% of the post test group.

In question #15 teachers reported that they now send students to the library in their leisure time more readily then before. 38% of the pre test group reported often or occasionally to this question, compared to 64% of the post test group.

Question #17 dealing with helping pupils develop skills in using reference sources, showed a slight increase in the extreme choice. 19% of the pre test group reported often as compared to 37% of the post test group.

In question #18 there was a slight shift to a more positive responses regarding helping students develop skills in note taking. 53% of the pre test teachers reported often or occasionally helping students develop these skills compared to 69% of the post test teachers.

Question #22 dealing with working with ones class in the library showed a shift to the more positive responses. In the pre test group 22% of the teachers reported either often or occasionally for this question as compared to 42% of the post test group.

In question #23 which deals with taping classroom activities, showed a decrease in the "never" category. 83% of the pre test group reported never taping and only 58% of the post test group reported never taping.

Summarizing the data from Table I, dealing with class presentations and activities, one can readily assume that a definite change has taken place. (questions #1, #14, #15, #17, #18, #22, and #23) Reference materials and sources appear to have gained in stature. Teachers apparently are trying more and different ways of approaching their teaching duties.

TEACHER SELF-EVALUATION

TABLE I

A. Class Presentations and Activities

To what extent do you:	Often	Occasionally	Seldom	Never
1. Use reference materials in helping students solve their personal or social problems?	29% 23%	36% 65%	24% 9%	12% 2%
2. Help students to be aware of the exact meaning of word-groups by sending them to reference sources?	21 28	48 51	19 19	12 2
3. Use transparencies to present overview of lesson materials?	14 21	45 53	26 19	14 7
4. Spend time with individual students on an isolated or single learning concept?	60 70	40 19	7	5
5. Have students check on references outside the classroom?	21 35	57 53	17 12	5
6. Help students select the important ideas related to a presentation, address, or problem?	57 51	36 40	7 7	2
7. Help students make in erences from facts and observations?	69 60	29 35	2 5	
8. Help students find evidences to support their hypotheses?	36 49	50 39	14 12	
9. Involve students in planning of your class activities.	31 30	43 49	24 19	2 2
10. Rely on standard text for presenting class materials?	43 51	31 21	14 21	12 7
11. Use a variety of non-print materials in your teaching (i.e., films, tapes, slides)?	52 28	36 63	12 9	
12. Pace your class activities because of individual differences?	64 65	31 30	5 2	2
13. Use filmstrips in your class presentations?	33 28	48 46	10 21	10 5
14. Permit pupils to work together in small groups?	57 72	36 28	5	2
15. Send students to the library in their leisure time?	19 30	19 34	33 16	29 16
16. Provide a wide variety of sources of information?	33 44	38 39	24 16	5

Top number = pre test percentages
Bottom number = post test percentages

	Often	Occasionally	Seldom	Never
17. Help pupils develop skills in using reference sources?	19 37	50 44	19 16	12 2
18. Help students develop skills in note taking?	24 16	29 53	31 23	17 7
19. Provide for using visual aids in securing evidence in solving a problem?	43 44	36 39	17 16	5
20. Provide learning activities for the individual members of your class?	50 51	36 42	14 5	
21. Encourage students to make class presentations as individuals or in small groups?	29 33	33 49	33 19	5
22. Work with your class in the library?	5 9	17 33	26 23	52 35
23. Tape your classroom activities for those not in attendance for that session?	 12	10 9	7 21	83 58
24. Tape your classroom presentations for self-evaluation purposes?	 2	10 14	17 19	74 63
25. Use the library resource materials in preparing for your class presentations?	29 23	38 46	17 28	17 2

Tables II, III, and IV deal with opinion gathering.

In Table II, on the following page, teachers are asked how they think their class would react. It is intended that the reader draw his own conclusions from the following data.

In Question #1 which deals with having enough library time a slight shift in the responses toward agree is noted. The pre test group responded with 36% in the "most would agree" or "almost all would agree" categories compared to 61% of the post test group.

The remaining questions were responded to in very much the same way as the pre test group responded.

TABLE II

B. Opinion Gathering How do you think your class would react?	Almost All Would Agree	Most Would Agree	About Half and Half	Most Would Disagree	Almost All Would Disagree
1. We have enough library time available to us.	7% 19%	29% 42%	33% 14%	26% 12%	5% 5%
2. The teacher spends too much time lecturing.	2	12 9	36 26	26 37	24 23
3. We never have enough films and movies in our class.	14 5	21 23	29 23	19 37	17 7
4. Our teacher really tries different things to make our class work interesting.	10 14	31 33	50 42	7 7	2
5. Our teacher never lets us do anything on our own.		10 2	24 23	33 42	33 28
6. Our teacher really knows how I feel about her subject.	5 7	43 51	43 33	10 5	
7. Schoolwork is fun.	7 5	19 30	55 44	17 14	2 2

Top number = pre test percentages Bottom number = post test percentages

In Table III (on the following page) reaction type opinion questions were asked the teachers.

The first question deals with giving students plenty of library time. 43% of the pre test group reported either they "would agree" or that they "would agree more than disagree." 63% of the post test group responded in the same manner.

The third question states that one has plenty of visual aids in our classes. 41% of the pre test group and 56% of the post test group either reported "would agree" or "would agree more than disagree."

In question #4, dealing with allowing plenty of student independence showed a shift from the "would agree" on the pre test (50%) (post 35%) to "would agree more than disagree on the post test (42%) (pre 26%).

Question #5 reports on the feeling that I know and understand each of my pupil's concerns in my classes. 50% of the pre test group and 76% of the post test group reported either that they "would agree" or "would agree more than disagree."

TABLE III

How do you react?	Would Agree	Would Agree More Than Disagree	About Half and Half	Would Disagree More Than Agree	Would Disagree
1. I give my students plenty of library time.	19% 33%	24% 30%	17% 14%	24% 12%	17% 7%
2. I spend too much time lecturing.	2 5	17 5	19 14	29 44	33 28
3. We have plenty of visual aids in our class.	17 23	24 33	19 21	17 14	24 5
4. I allow for plenty of student independence.	50 35	26 42	12 9	10 7	2
5. I feel that I know and understand each of my pupil's concerns in my classes.	5 16	45 60	31 9	14 9	5

Top number = pre test percentages Bottom number = post test percentages

Table IV (on the following pages) sought teachers reactions to the statements.

Question #1 stated that we are doing a good job in teaching in our school. In the pre test group 17% reported "strongly agree." The post test group reported 54% "strongly agree."

In question #2, dealing with having adequate time for planning and preparation, showed a shift in direction away from "strongly agree" and "agree." 59% of the pre test group and 14% of the post test group reported in these categories.

Question #4 relates to working with individuals and small groups accomplishing more in learning than does large group instruction. There was a shift in the extreme response of "strongly agree" towards "agree." In the pre test 64% reported "strongly agree" and 19% reported "agree." The post test group reported 42% "strongly agree" and 42% "agree."

TABLE IV

How would you react to these statements?	SA	A	TA	TD	D	SD
1. We are doing a good job in teaching in our school.	17% 54%	64% 44%	19% 2%			
2. We have adequate time for planning and preparation.	14 2	45 12	24 23	7 33	5 19	5 12
3. There are plenty of teaching aids available to us if we want them.	12 23	45 26	33 30	7 12	5 2	 7
4. Working with individuals and small groups accomplishes more in learning than does large group instruction.	64 42	19 42	10 7	5 7	2 2	
5. Programmed learning is not used extensively in our school.	2	29 19	38 30	21 14	10 28	 9
6. Programmed learning would be used if more materials were available.	12 7	40 33	33 30	14 21	 5	
7. The Dial Access System being installed will provide immediate access to selected audio-visual materials.	24 19	45 42	21 23	5 9	 5	5 2
8. The purpose of the new library Dial Access System is to provide more free time for the teacher but will probably involve more work.	7 12	17 23	31 14	21 14	17 23	7 14
9. Most teachers will not utilize the Dial Access System because they are reluctant to try something new.		2 7	14 16	38 28	24 30	21 19
10. Dial Access instruction is all right but it costs too much for what use it will get.		5 5	19 5	21 28	31 40	24 23
11. There are not enough teachers who know what the Dial Access System is to be used for.	2	17 9	21 9	26 23	24 44	10 14
12. Subject areas other than the ones I teach will find more use for the Dial Access System than I do.	7 12	19 28	17 16	21 7	14 21	21 16
13. Recording of lessons and review units makes it rather impersonal.	2 2	17 12	31 21	19 42	29 14	2 7
14. Most students can learn without too much concern for individual instruction.		2 12	14 12	36 23	33 37	14 16
15. It will take much more extra planning to allow for student time in the library.	2 14	29 30	29 30	24 19	12 7	5
16. Most students are not interested in studying alone no matter how good it is for them.		10 5	14 26	45 39	26 23	5 7

Top number = pre test percentages Bottom number = post test percentages

	SA	A	TA	TD	D	SD
17. Somebody is going to have to monitor the student carrels to avoid misuse.	10 5	24 35	50 33	12 21	5 5	2
18. Strong and more rigid planning on the teachers part eliminates much of the need for individualized instruction.	2	2	17 21	26 35	43 33	10 9
19. There is a little too much emphasis placed on the use of multi-media.		2	12 16	50 37	24 33	12 14
20. Placement of equipment at one central location tends to limit its effectiveness.	5 2	14 14	14 19	29 30	26 27	12 7

Table V (on the following page) deals with teachers knowledge of the DAIRS.

Questions #1, #2, and #4 show a greater percentage of the preferred responses. Question #1 dealing with the source of funds 91% of the post test group responded correctly as compared to 64% of the pre test group. Question #2 70% responded favorably in the post test group as compared to 57% of the pre test group. Question #4 98% of the post test group responded favorably and 86% of the pre test group did also.

Question #9 showed an interesting shift. This question deals with the chief arguments against the DAIRS. The one response on the post test that gained in percentage from the pre test was not freeing teachers for planning and preparation. The shift was from 7% to 21% indicating that perhaps teachers did not anticipate this as being a problem when it actually is a problem.

TABLE V

C. What Do You Know About DAIRS?	Pre Percent	Post Percent
1. The Dial Access Information System is being installed in our school with funds available through		
A. Program planning monies	5%	0%
B. ESEA, Title I	10	5
C. ESEA, Title II	19	2
D. ESEA, Title III	64	91
E. Public Law 874	2	0
2. The Dial Access System will		
A. Replace the language laboratories	2	0
B. Be in addition to the language laboratory	38	30
C. Make the language laboratory more flexible	57	70
D. Have nothing to do with the language lab	2	0
3. Which description best fits the Dial Access System being installed in our school?		
A. It is an experimental computer-assisted instruction system	7	2
B. It is an electronic system for distributing audio and visual materials which are stored in a central location	10	19
C. It is an electronic system for distributing only audio materials	71	77
D. It is an electronic system for distributing information by telephone by a special link-up with a computer	12	2
4. The Dial Access System can be utilized only by students		
A. Who are at one of special study carrels	0	0
B. Who are in the language labs	0	0
C. Who are in selected classrooms	5	2
D. All of the above	46	98
E. A and C above	10	0
5. The technical application of the DAIRS will be		
A. Limited to the number of receiving stations in the building	52	53
B. Limited because only four programs can be sent out at one time	0	0
C. Limited because each program must be monitored as it is sent out	2	2
D. Limited because it provides for listen-only facilities	45	45
6. The DAIRS being installed can be utilized		
A. By student or teacher dialing and automatically starting the selected program.	43	44
B. By time-scheduling wherein an attendant presets the times at which selected programs are to be played	10	0
C. By a person manually placing tapes on the system following a telephoned or written request	0	2
D. All of the above	26	26
E. A and C above	21	28

	Pre Percent	Post Percent
7. Some carrels will be set up for video transmission		
A. This statement is not true	71	65
B. This statement is true	29	30
8. The system being installed allows for		
A. Expansion making it possible to increase the number of student receiving stations.	19	14
B. Expansion making it possible to add video to the present system	5	17
C. Expansion making it possible to add audio to the present system	2	2
D. All of the above	19	33
E. A and B only	55	44
9. The chief arguments against the DAIRS are:		
A. Lack of demonstrated cost effectiveness	36	21
B. Lack of programmed instruction techniques	31	28
C. Placement of equipment in a central location	7	5
D. Does not free teachers for planning and preparation	7	21
E. All of the above	19	16
10. Most of the DAIRS fail in schools where		
A. The staff is not committed to individualized instruction	43	40
B. There are insufficient latitudes in choosing and using materials	21	14
C. There is not enough financial compensation, released time, or other such incentives offered to the staff	24	11
D. There is lacking strong administrative pressure	12	30
E. There is not expert assistance available to the staff and students	0	0

Table VI (on the following page) deals with opinions of teachers in regard to the DAIRS.

Question #1 shows a shift in the positive direction concerning teachers being informed about the DAIRS. 12% of the pre test group and 40% of the post test group responded that they were "rather well informed."

Question #2 concerning where teachers gained information and understanding of the DAIRS showed a large shift in responses. In the pre test sample 83% of the teachers responded to the choice that deals with talking with other school people. The post test saw only 49% of the teachers responding in this manner. The post test sample reported 44% of their answers were from the choice that deals with actual use of the DAIRS. No one responded to this choice on the pre test.

In question #3 dealing with the personal view towards the use of the DAIRS, saw 21% of the pre test group seeing it as a really needed addition where as 51% of the post test group saw it as a really needed addition. This shift is apparently a positive sign of the DAIRS acceptance in the school setting.

Question #5 concerning ways one thinks the DAIRS will be beneficial in their teachings, saw really only two major changes. The selection dealing with potential for drill exercises in the classroom moved from the fifth most often chosen item on the pre test to the most often chosen item on the post test. The selection dealing with interviews with experts, leaders, etc. moved from third on the pre test to seventh on the post test.

TABLE VI

D. How Do You Think You Will Use DAIRS?	Pre Percent	Post Percent
1. In regard to the DAIRS, I would classify myself as:		
A. Rather well informed	12%	40%
B. Somewhat informed	67	47
C. Very little understanding	21	9
D. No real information at all	0	2
2. My information and understanding of the DAIRS has been:		
A. Largely from actual use of the DAIRS or similar systems	0	44
B. From having read about the DAIRS and similar systems	5	2
C. From talk with other school people	83	49
D. From instruction programs either at college or in workshops	12	14
3. I would classify my views toward the use of the DAIRS in our school:		
A. As another "gimmick"	0	0
B. As a really needed addition	21	51
C. As an exciting addition but I'm not sure of its potential	76	49
D. As something that will probably be too complicated for me to use	2	
4. As I understand the DAIRS, I will probably		
A. Use it rather extensively	64	53
B. Not be able to use it in my classes	2	9
C. Give it a try but I doubt its usefulness to me or my classes.	17	7
D. Use it more than do my students.	5	9
E. Have my students use it but I may not	12	19
*5. Check the ways in which you think the DAIRS will be most beneficial to your teaching.		
A. Listening exercises (such as poetry, etc.)	52	42
B. Listening to plays, speeches, excerpts from dramas, etc.)	36	37
C. Music appreciation	17	23
D. Interviews with experts, leaders, etc.	45	30
E. Watching of demonstration classes	7	9
F. Movie reviews, filmstrip presentations, etc.	45	48
G. Live TV coverage	12	9
H. Lectures and presentations	60	51
I. Laboratory orientations	29	33
J. Dictation exercises	21	23
K. Drill exercises	43	58
L. Demonstration	38	30
M. Documentaries	14	12
N. Orientation - School Information	12	29
*6. Check whether or not you think you could use the DAIRS for:		
A. Assisting students in note-taking skills	31	44
B. Make-up exercises	83	93
C. Recording class presentations	71	60
D. Enrichment	86	91
E. Student-teacher orientation	19	25
F. Inservice training programs	21	30
G. Guidance	29	21

*Questions #5 & #6 were not separated into male and female responses

Final Report #4

STUDENT-TEACHER ATTITUDE SURVEY
POST TEST AND SUMMARY
Mitchell Junior High School
ESEA Title III Project

Center Report Series 70-101

Bruce G. Milne, Evaluator
Charles Draheim, Research Asst.

October 10, 1972

Educational Research and Service Center
School of Education
University of South Dakota
Vermillion, South Dakota

October 10, 1972

Mr. Wilfred W. Richter
Director of Planning
Mitchell Independent School Dist. #45
Mitchell, South Dakota 57301

Dear Mr. Richter:

The Final Report of the Student-Teacher Attitude Survey is presented on the following pages. The brief summary that is included with the report covers only the most drastic changes from pre to post test.

The complete attitude survey is presented with the percentages of the responses given for the pre test and the post test. This method of presentation was chosen as it gives the reader a clear and concise picture of the survey findings.

Respectfully submitted,

Bruce G. Milne

Bruce G. Milne, Director
Ed. Research & Serv. Center

BGM:akj
Enclosure

MITCHELL REPORT (POST)
Student-Teachers

This report is a brief summary of the pre and post sample of the student-teacher evaluation of the DAIRS. The comparison of the sample is really not meaningful on many quest-ons due to unknown classification data required for analysis (example: Physical Education teacher might have less use of (or less opportunity to use) the DAIRS than a Social Studies teacher) Perhaps it is best to present the raw data and let one draw his own conclusions.

On the last page of the table are the additional comments that were made by the pre and post test group. These comments afford a source of feedback that is interesting and could be very valuable.

TABLE I

	Pre Test Frequency	Post Test Frequency
1. How would you classify your understanding of the Dial Access Information Retrieval System, its use and purpose, at the Mitchell Junior High?		
A. Have a good understanding	5	2
B. Somewhat familiar with it	4	3
C. Only slightly familiar with it		2
D. Have little or no knowledge of it at all		1
2. How much of an effort was made by the staff at Mitchell Junior High to explain the purpose and use of the DAIRS to you?		
A. High degree of effort	2	2
B. Reasonable amount of effort	6	3
C. Some effort		1
D. Little or no effort	1	1
3. Relative to the use of DAIRS, did you personally use the system?		
A. Used it considerably	1	1
B. Used it somewhat	3	0
C. Merely tried it	4	2
D. Did not use it at all	1	5
4. Relative to the use of DAIRS in the classes you observed or taught, was the system utilized?		
A. Used frequently	2	2
B. Used occasionally	3	0
C. Used very little if at all	4	5
5. How effective do you feel the DAIRS is in teaching students?		
A. Very effective	3	5
B. Somewhat effective	5	3
C. Only slightly effective	1	0
D. Little or no effect		0
6. How would you classify the interest of most of the teachers toward the use of DAIRS in their teaching?		
A. Mostly interested and positive	7	3
B. Interested	1	3
C. Somewhat passive	1	0
D. Not interested and negative		0
7. How would you classify the interest of most of the students toward the use of DAIRS in their learning program?		
A. Mostly interested and positive	4	2
B. Interested	4	4
C. Somewhat passive	1	2
D. Not interested and negative		0

	Pre Test Frequency	Post Test Frequency
8. How would you classify your interest in incorporating the use of DAIRS or any other audio tutorial system in your future teaching?		
A. High Interest	8	5
B. Interested	1	3
C. Moderately interested		1
D. Not too interested		0
E. Forget it!		0
9. How beneficial do you think an inservice training on the use of the audio-tutorial approach to teaching would be for the Mitchell Junior High teachers?		
A. Highly beneficial	8	5
B. Somewhat beneficial	1	3
C. Of limited benefit		0
D. Of little or no value		0
10. How would you describe your college preparation for using audio media in your teaching?		
A. Very adequate	1	1
B. Adequate	2	6
C. Limited or superficial	6	1
D. None or worthless		0

Additional Comments: Pre Test Group

a. Seemed to be some problem with maintenance. Som programs were taken off the system before some students were able to utilize programs for test reviews.
b. The faculty does not seem to fully appreciate or utilize the present DAIRS. Part of this is because of time factor. Too little school day time devoted to lesson preparation and almost no para-professional help.
c. It is a good system, but it could still be improved on. If all the decks were working more material could be added when it was needed by teachers and material still being used wouldn't be replaced by more urgent subjects. It is to be used by students trying to catch up on work missed, but if the tape is gone so is their best chance. It's too bad more teachers don't use it.
d. I personally would like to see the DAIRS system incorporated into many more school systems. It is very beneficial both for the student and the instructor and sets up a very good learning situation.

Additional Comments: Post Test Group

a. I had much effort put forth to show me how the system worked and operated. I failed to explain I hadn't gone through an interim class.
b. I used it for filmstrips, slides, overviews, and correction of tests
c. I feel the DAIRS is very effective if not overused. Some of the students want to use it all the time. If used with moderation, its effect would be better.
d. Most of the students are interested, but not overly interested
e. I believe the system would be effective in coordinating a plan of study to follow
f. May be effective for those who do not use it frequently

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